



Improvement of Association Neural Network by Attractor Dynamic

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In this paper, we propose a new method in principal components analysis neural network for face normalization in which is used attractor dynamics. Principal components analysis neural network is used for principal components extraction and nonlinear signal processing and normalization. The first reason for usage of them is learning and simulation of complex connections and second these connections are learned by means of structure in which the information is analyzed and distributed on neurons and weights and then combination of results is used for output. Indeed this network makes interpolation between information of input and its own connections. But this network couldn't explain attractive behavior that is used in brain function obviously. This paper changes the structure of previous network little and able it has attractive behavior. Results show that proposed structure has a good performance to face image retrieval in different conditions.

